

## CLAIMS

What is claimed is:

1 1. A computer implemented service for updating a merchant customer account  
2 database over a network, comprising:  
3 a first database of information having a plurality of merchant customer  
4 records;  
5 a remote merchant customer database having a first plurality of customer  
6 account records;  
7 a merchant process server for appending a merchant processing request to at  
8 least one of said first plurality of customer accounts to produce a merchant processing  
9 request data file; and  
10 a process server for receiving said first database of information and said  
11 merchant processing request data file, said process server configured to compare said  
12 first database of information and said merchant processing request data file to produce  
13 a first comparison data file, said first comparison data file comprising a first record  
14 including a compilation of said merchant processing requests accepted for processing  
15 by said process server, said first comparison data file further comprising a second  
16 record including a compilation of said merchant processing requests rejected for  
17 processing by said process server, said process server further configured to update  
18 said first database of information in accordance with said merchant processing request  
19 data file.

2. A computer implemented service according to claim 1 wherein, said service  
further comprises a second database of information having a second plurality of  
customer transaction accounts records.

1 3. A computer implemented service according to claim 2 wherein, said process  
2 server is configured to receive said second database of information, said process  
3 server configured to compare said first database of information and said second  
4 database of information to produce a second comparison data file, said second  
5 comparison file comprising a plurality of updated customer transaction account  
6 records, said process server further configured to update said first database of  
7 information in accordance with said second database of information.

4. A computer implemented service according to claim 3, wherein, said process  
server is further configured to append a provider processing instruction to at least one  
of said plurality of updated customer transaction account records to produce a  
provider processing request data file.

5. A computer implemented service, according to claim 4, wherein said process  
server is configured to provide an update summary file, said update summary  
comprising at least one of said first comparison data file and said provider processing  
request data file.

6. A computer implemented service according to claim 5, wherein said update  
summary report is provided to said merchant process server periodically.

7. A computer implemented service according to claim 5 wherein, said merchant  
process server is configured to retrieve said update summary file.

8. A computer implemented service according to claim 7 wherein, said merchant server is further configured to update said remote merchant customer database in accordance with said update summary file.

9. A computer implemented service according to claim 1 wherein, said at least one of said first plurality of customer transaction account records is pre-authorized.

10. A computer implemented service according to claim 1 wherein, said at least one of said first plurality of distinct customer transaction account records is provided a merchant processing request indicating that said at least one of said first plurality of customer transaction account records is to be removed from at least one of said plurality of merchant customer records.

11. A computer implemented service according to claim 1, wherein said at least one of said first plurality of customer transaction account records is provided a merchant processing request indicating that said at least one of said first plurality of distinct customer transaction card records requires alteration by said process server.

12. A computer implemented service according to claim 1, wherein said remote merchant customer database is configured to be updated manually.

13. A computer implemented service according to claim 7, wherein said merchant server is configured to update said remote merchant customer database in accordance with said provider processing instruction.

14. A computer implemented service according to claim 1, wherein said rejected merchant process request is verified.

15. A computer implemented service according to claim 13, wherein said merchant process server appends said verified rejected merchant process request to said merchant process request data file.

16. A computer implemented service according to claim 13, wherein said merchant process request data file includes said verified rejected merchant process request.

17. A computer implemented service according to claim 1, wherein said process server is configured to tally the number of rejected merchant processing request.

18. A computer implemented service according to claim 17, wherein said process server comprises a predetermined rejection threshold.

19. A computer implemented service according to claim 18, wherein said process server compares the rejection threshold to said tally of the number of rejected merchant process request, said process server further configured reject said merchant process request data file when the rejection threshold is reached.

20. A computer implemented service according to claim 5, wherein said process server is configured to tally said accepted merchant processing request, in accordance with a merchant process request grouping.

21 A computer implemented service according to claim 20, wherein said update summary file comprises said tally said accepted merchant processing request.

1 22. A computer implemented service according to claim 1, wherein at least one of  
2 said first plurality of customer transaction accounts is outdated, said process server  
3 being configured to add said outdated at least one of said first plurality of customer  
4 transaction account records to said first database of information, said outdated one of  
5 said first plurality of customer transaction account records remaining permanently  
6 fixed.

1 23. A computer implemented service for updating a merchant customer  
2 transaction account database over a network, comprising:  
3 a first database of information having a plurality of merchant customer records  
4 wherein each of said merchant customer records further comprises a first plurality of  
5 customer transaction account records;

6 a second database of information having a second plurality of customer  
7 transaction account records;

8 a first remote merchant customer database stored on a remote merchant  
9 computer having a merchant database processor, said first remote merchant customer  
10 database having a third plurality of customer transaction account records, said first  
11 remote merchant customer database configured to provide at least one of said third  
12 plurality of customer transaction account records in a registry file, said at least one of  
13 said third plurality of customer transaction account records being provided a  
14 merchant transaction code; and

15 a process server for receiving said registry file, comparing said at least one of  
16 said third plurality of customer transaction account records in said registry file to at

17 least one of said first plurality of customer transaction account records comprising  
18 said plurality of merchant customer records and providing a maintenance file,  
19 wherein said comparison is done according to a predetermined order of steps  
20 corresponding to said merchant transaction code, said maintenance file comprising a  
21 fourth plurality of customer transaction account records, at least one of said fourth  
22 plurality of customer transaction account records being provided a return transaction  
23 code, said maintenance file being provided to said merchant database processor, said  
24 merchant database processor updating at least one of said third plurality of customer  
25 transaction account records on said first remote merchant customer database, wherein  
26 said updated customer transaction account record corresponds to said customer  
27 transaction account record having said return transaction code.

24. A computer implemented service according to claim 23, wherein said at least one of said third plurality of customer transaction account records is pre-authorized prior to storing said at least one of said third plurality of customer transaction account records on said first remote merchant customer database.

25. A computer implemented service according to claim 24, wherein said at least one of said third plurality of customer transaction account records is provided a merchant transaction code indicating that said at least one of said third plurality of customer transaction account records is enrolled in said service for updating a merchant customer transaction account database over a network.

26. A computer implemented service according to claim 25, wherein said registry file includes a plurality of said enrolled ones of said third plurality of customer transaction account records.

27. A computer implemented service according to claim 26, wherein said registry file includes a plurality of customer transaction account records of customers paying charges with at least one of said customer transaction account records, said registry file comprising an initial registry file.

28. A computer implemented service according to claim 27, wherein said first plurality of customer transaction accounts includes said initial registry file.

29. A computer implemented service according to claim 25, wherein said at least one of said third plurality of customer transaction account records is provided a merchant transaction code indicating that said at least one of said third plurality of customer transaction account records is removed from said service for updating a merchant customer transaction account database over a network.

30. A computer implemented service according to claim 25, wherein said at least one of said third plurality of customer transaction account records is provided a merchant transaction code indicating that said at least one of said third plurality of customer transaction account records requires alteration by said service for updating a merchant customer transaction account database over a network.

31. A computer implemented service according to claim 23, wherein said registry file is provided to said process server periodically.

32. A computer implemented service according to claim 23, wherein said maintenance file is provided to said merchant database processor manually for

updating at least one of said third plurality of customer transaction account records on said first remote merchant customer database.

33. A computer implemented service according to claim 23, wherein said updating of said at least one of said third plurality of customer transaction account records on said first remote merchant customer database according to a predetermined order of steps corresponding to said return transaction code.

34. A computer implemented service according to claim 23, wherein said maintenance file further comprises a rejected records file, said rejected records file comprising those of said those of said third plurality of customer transaction account records rejected by said process server.

35. A computer implemented service according to claim 34, wherein said those of said third plurality of customer transaction account records rejected by said process server are verified and re-entered in said registry file, wherein said registry file comprising said verified rejected records is resubmitted to said process server.

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- 1 (36) A computer implemented service according to claim 35, wherein said process  
2 server comprises a predetermined rejection threshold, said rejection threshold being  
3 set such that where the rejection threshold is reached, said registry file is rejected by  
4 said server, said rejection threshold being reached when a predetermined number of  
5 said third plurality of customer transaction account records is rejected by said process  
6 server.

37. A computer implemented service according to claim 23 wherein said maintenance file is provided to said merchant database processor periodically.

38. A computer implemented service according to claim 23 including a plurality of maintenance files wherein said maintenance files are ordered such that each file may be processed in the order in which it was provided to the merchant database processor.

1 39. A computer implemented service according to claim 36, wherein said process  
2 server provides a summary report to said merchant database processor, said summary  
3 report comprising information corresponding to at least one of the number of said  
4 third plurality of customer transaction account records processed by said process  
5 server and the number of said third plurality of customer transaction account records  
6 rejected by said process server.

1 40. A computer implemented service according to claim 23 wherein said process  
2 server compares said second plurality of customer credit records to said first plurality  
3 of customer transaction account records to provide a server initiated maintenance file  
4 comprising a fifth plurality of customer transaction account records, said fifth  
5 plurality of customer transaction account records being provided said return  
6 transaction code, said maintenance file further comprising said fifth plurality of  
7 customer transaction account records.

1 41. A computer implemented service according to claim 26, wherein said at least  
2 one of said a plurality of said enrolled ones of said third plurality of customer  
3 transaction account records is outdated, said outdated enrolled one of said third

4 plurality of customer transaction account records is provided to said first plurality of  
5 customer transaction account records, said outdated enrolled one of said third plurality  
6 of customer transaction account records remaining permanently fixed.

1 42. A method of updating a merchant customer transaction account database using  
2 a computer network, comprising:

3 receiving a first plurality of customer transaction account records;

4 pre-authorizing said first plurality of customer transaction account records,

5 storing said pre-authorized said first plurality of customer transaction account records

6 on a local database, said local database being maintained by a local process server;

7 storing said pre-authorized said first plurality of customer transaction account

8 records in a remote database, said remote database being accessed through a remote

9 process server;

10 providing a periodic registry file to said remote process server, said periodic

11 registry file comprising a update request to said pre-authorized plurality of customer

12 transaction account records, said process server comparing said periodic registry file

13 to said pre-authorized said first plurality of customer transaction account record, and

14 updating said pre-authorized said first plurality of customer transaction account

15 records according to a predetermined order of process steps, said remote process

16 server generating a maintenance file in response to said comparison of said periodic

17 registry file to said pre-authorized said first plurality of customer transaction account

18 record;

19 providing said maintenance file to said local process server, said local process

20 server comparing said maintenance file to said pre-authorized said first plurality of

21 customer transaction account records on a local database; and

22 updating said pre-authorized said first plurality of customer transaction  
23 account records on a local database in response to said maintenance file.

1 43. A method of updating a merchant customer transaction account database using  
2 a computer network, comprising:

3 receiving a first plurality of customer transaction account records;

4 storing said first plurality of customer transaction account records on a local  
5 database, said local database being maintained by a local process server;

6 storing said first plurality of customer transaction account records in a remote  
7 database, said remote database being accessed through a remote process server;

8 providing a periodic registry file to said remote process server, said daily  
9 registry file comprising a update request to said plurality of customer transaction  
10 account records, said process server comparing said plurality registry file to said first  
11 plurality of customer transaction account record, and updating said first plurality of  
12 customer transaction account records according to a order of process steps, said  
13 remote process server generating a maintenance file in response to said comparison of  
14 said periodic registry file to said first plurality of customer transaction account  
15 records;

16 providing said maintenance file to said local process server, said local process  
17 server comparing said maintenance file to said first plurality of customer transaction  
18 account records on a local database; and

19 updating said pre-authorized said first plurality of customer transaction  
20 account records on a local database in response to said maintenance file.